Application No.: 10/808,389 1374.43628X00 Page 2 of 12

## Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims**:

1. (Currently Amended) A semiconductor device comprising:

a printed wiring board having a top surface, and a backside surface, on the side of the printed wiring board, opposite from the top surface;

a second semiconductor chip mounted over the top surface of the printed wiring board, including first circuits operated at a first frequency and second circuits operated at a second frequency.

wherein the first frequency is distinct from the second frequency;

a first semiconductor chip disposed so as to overlie the second semiconductor chip, including a first circuit and a second circuit,

wherein the first circuit is independent of the second circuit of the first semiconductor chip; and

a plurality of conductive wires electrically bonding the first semiconductor chip to the printed wiring board;

wherein the first circuit of the first semiconductor chip is disposed opposite to the second circuits of the second semiconductor chip, while the second circuit of the first semiconductor chip is disposed opposite to the first circuits of the second semiconductor chip.

Application No.: 10/808,389 1374.43628X00 Page 3 of 12

2. (Currently Amended) A semiconductor device according to claim 1,

wherein the first semiconductor chip and the second semiconductor chip each include a third circuit operated at a third frequency and a fourth circuit operated at a fourth frequency;

wherein, the third circuit of the first semiconductor chip is disposed opposite to the fourth circuit of the second semiconductor chip, while the fourth circuit of the first semiconductor chip is disposed opposite to the third circuit of the second semiconductor chip.

wherein the third frequency is distinct from the first and second frequencies, and

wherein the third circuit is independent of the first and second circuits.

3. (Original) A semiconductor device according to claim 1, further comprising:

amplifier circuits for amplifying input signals in three stages,

wherein the amplifier circuits in the initial stage of the three stages are installed in the first semiconductor chip, and the amplifier circuits in second and third stages, respectively, are installed in the second semiconductor chip.

4. (Previously Presented) A semiconductor device according to claim 1, wherein the first and second frequencies are in the ranges of 880 MHz ≤ the first frequency ≤ 915 MHz and 1710 MHz ≤ the second frequency ≤ 1785 MHz, respectively.

Application No.: 10/808,389 1374.43628X00 Page 4 of 12

5. (Original) A semiconductor device according to claim 1, wherein the second semiconductor chip is electrically bonded to the printed wiring board with conductive wires.

- 6. (Original) A semiconductor device according to claim 1, wherein the second semiconductor chip is bonded to the printed wiring board by flip bonding.
- 7. (Previously Presented) A semiconductor device according to claim 6, wherein a first wire that is electrically bonded to the first circuit of the first semiconductor chip is disposed opposite to a first wiring of the printed wiring board, which is electrically bonded to the second circuits of the second semiconductor chip, respectively,

while a second wire that is electrically bonded to the second circuit of the first semiconductor chip is disposed opposite to a second wiring of the printed wiring board, which is electrically bonded to the first circuits of the second semiconductor chip, respectively.

8. (Currently Amended) A semiconductor device comprising:

a printed wiring board having a top surface, and a backside surface, on the side of the printed wiring board, opposite from the top surface;

Application No.: 10/808,389 1374.43628X00 Page 5 of 12

a second semiconductor chip mounted over the top surface of the printed wiring board, including first circuits operated at a first frequency and second circuits operated at a second frequency; a frequency, a plurality of first electrodes bonded to the first circuits, respectively, and a plurality of second electrodes bonded to the second circuits, respectively,

wherein the first frequency is distinct from the second frequency;

a first semiconductor chip disposed so as to overlie the second semiconductor chip, including a first circuit, a second circuit, a plurality of first electrodes bonded to the first circuit, and a plurality of second electrodes bonded to the second circuit,

wherein the first circuit is independent of the second circuit of the first semiconductor chip; and

a plurality of wires electrically bonding the first semiconductor chip and the second semiconductor chip to the printed wiring board, respectively;

wherein the plurality of wires bonded to the plurality of first electrodes and second electrodes of the first semiconductor chip, respectively, are disposed so as to cross a pair of edges, that are opposed to each other, of a top surface of the first semiconductor chip, extending in a direction intersecting a direction in which the first pads of the second semiconductor chip are arranged, and

wherein the plurality of wires bonded to the plurality of first electrodes and second electrodes of the second semiconductor chip, respectively, are disposed so as to cross a pair of edges, that are opposed to each other, of a top surface of the

Application No.: 10/808,389 1374.43628X00 Page 6 of 12

second semiconductor chip, extending in a direction intersecting a direction in which the first electrodes of the first semiconductor chip are arranged.

Claims 9-13. (Canceled without prejudice or disclaimer).